

REMARKS/ARGUMENTS

Claims 1-19 were pending in this application before the present response. In the Office Action dated November 9, 2007, claims 1-19 stand rejected under 35 U.S.C. § 103.

This paper does not rewrite, cancel, or add claims. Thus, claims 1-19 remain pending in this application. Applicants respectfully request reconsideration and allowance of all pending claims, in view of the following remarks.

Claim Rejections – 35 U.S.C. § 103

Claims 1-4, 6-9, and 11-19

Claims 1-4, 6-9, and 11-19 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Barkan, European Patent Application Number 0 738 058 (hereinafter “Barkan”), in view of Kung et al., U.S. Patent Number 6,889,321 (hereinafter “Kung”). The Applicants respectfully traverse this rejection.

The difference between the presently claimed invention and the Barkan and Kung references, taken either alone or in combination, are nonobvious. As reiterated by the Supreme Court in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. ___, 82 USPQ.2d 1385, 1391 (2007), the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). Thus, the analysis of patentability under 35 U.S.C. 103 requires consideration of four factors: (i) the scope and content of the prior art, (ii) the differences between the prior art and the claims as a whole, (iii) the level of ordinary skill in the art, and (iv) objective evidence of non-obviousness. *Graham* at 13. Combining elements from different prior art references in hindsight is to be avoided.

The Barkan reference describes an apparatus for transferring an encryption key in a secure way to facilitate establishing a secure communication link. The Barkan apparatus includes a key management device attached to each user’s encryption machine. The key management device contains a list of secure communication partners and their respective encryption keys and parameters. To initiate a secure link session, the user keys-in the identification of the desired addressee. If the details of the addressee are

available, the Barkan apparatus automatically transfers the encryption key and the other communication parameters for the addressee to the encryption machine to establish the secure link. If the details of the addressee are not available, the Barkan apparatus automatically connects to a secure key distribution center to get the encryption key and parameters for that addressee.

The Office Action acknowledges that the Barkan reference does not describe generating a secret key at the first gateway controller; distributing the secret key to the first and second telephony adapters over previously established secure connections; and establishing the secure communication channel between the first user and the second user by encryption and decrypting information using the secret key. The Office Action also acknowledges that the Barkan reference fails to teach the use of telephony adapters or the distribution of a key to the telephony adapters. To make up for these shortcomings, the Examiner relies on the Kung reference.

The Kung reference describes a broadband network that provides interconnection between customer locations utilizing the Internet Protocol (IP) network, the public switched telephone network (PSTN), ATM networks, the Internet, and other systems. The broadband network carries IP telephony or multimedia signals over the PSTN, Internet, or wireless communication networks. IP telephony signals travel through the broadband network via an Internet connection to an IP central station (element 200). The IP central station (element 200) includes servers and gateways to provide intelligence and traffic management for the network. For example, the IP central station (element 200) may manage voice information transferred from the PSTN, through the IP network, and into and out of one or more devices such as those connected to a broadband residential gateway (element 300), and may manage the routing and call set-up information. The IP central station (element 200) includes a call manager (element 218) to provide a centralized call control center for supporting call set-up and teardown in the broadband network. The call manager (element 218) may provide trunk and line information maintenance, call state maintenance for the duration of a call, and/or user service features execution. As taught by Kung, the call manager (element 218) is a call feature server that **interacts with various gateways in the broadband network**, such as the signaling gateway (element 234), accounting gateway (element 240), voice gateway (element 232),

and multimedia gateway (element 230), to route the call, but **the call manager of Kung is not a gateway**. To provide secured communication in the broadband network, the gateways and servers in the broadband network are provided an initial encryption key. These gateways and servers include the broadband residential gateway (element 300) and a secured communication feature server (call manager 218). Kung teaches that the secured communication feature server (call manager 218) also **provides an updated encryption key for the initial encryption key**.

In contrast, the presently claimed invention, as recited in independent claims 1, 6, 7, 11, and 15, describes “a first and a second user, wherein the first user and the second user are coupled to first and second telephony adapters, which in turn, are coupled to first and second gateway controllers, respectively”. The first and second **gateway controllers “control user access to the IP telephony network”**, and “the telephony adapters encrypt and decrypt user information exchanged over the IP telephony network”. The first and second **users are coupled to** the first and second **telephony adapters**. Thus, the first and second telephony adapters provide connectivity between the first and second users and first and second gateways. In further contrast, each gateway in the presently claimed invention is a device that controls user access (*i.e.*, entering and exiting) to the IP telephony network. The secret key is generated at the first gateway controller and is distributed to the first and second telephony adapters.

The Barkan and Kung references, taken either alone or in combination, do not describe generating a secret key at the first gateway controller, distributing the secret key to both telephony adapters, or the telephony adapters as described in the claims. The call manager described in the Kung reference is a call feature server that interfaces with various gateways, but the call manager is not a gateway or a telephony adapter. The call manager does not control access to the IP telephony network, rather the call manager interacts with other gateways in the broadband network. Thus, Kung does not make up for the shortcomings of Barkan because it does not describe generation of a secret key at the first gateway, distribution of the secret key to both telephony adapters, or the telephony adapters as described in the claims.

Since Kung fails to supply features missing from Barkan, the combination of Barkan and Kung cannot suggest the presently claimed invention and cannot render the

claims obvious. Thus, no matter how Barkan and Kung may be combined (even assuming, arguendo, that one of ordinary skill in the art would be led to combine them) the resulting combination is not the invention recited in independent claims 1, 6, 7, 11, and 15.

Furthermore, the Kung reference **teaches away** from the presently claimed invention. A person of ordinary skill in the art considering the Kung reference in view of the Barkan reference would generate the encryption key at the call manager, and distribute the encryption key to a gateway, such as the voice gateway (element 232 in Kung), which controls the access by a first and second user to the IP telephony network. Thus, the Kung reference teaches away from the presently claimed invention of generating a secret key at the first gateway controller and distributing the secret key to the first and second telephony adapters. Based on the disclosure in Kung the person of ordinary skill in the art would be discouraged from generating the encryption key at the gateway, and would be further discouraged from using a separate gateway coupled to the first and second telephony adapter that is then coupled to the first and second user. Thus, a *prima facie* conclusion of obviousness cannot be drawn from the combination of the Barkan and Kung references. Applicants respectfully submit that Kung fails to provide a basis for a rejection under 35 U.S.C. § 103, at least because Kung teaches away from generating a secret key at the first gateway controller and distributing the secret key to the first and second telephony adapters. Because Kung is an improper basis for rejecting Applicant's claims, the combination of Kung with Barkan, or with other prior art references, also is an improper basis for rejecting Applicants' claims.

For at least the aforementioned reasons, independent claims 1, 6, 7, 11, and 15 are patentable over the Barkan and Kung references, either taken alone or in combination. Thus, the Examiner should withdraw the 35 U.S.C. § 103 obviousness rejection as to independent claims 1, 6, 7, 11, and 15.

Claims 2-4, 8-9, 12-14, and 16-19 depend from either independent claim 1, 6, 7, 11, or 15. For the previously stated reasons, independent claims 1, 6, 7, 11, and 15 are allowable. Since any claim that depends from an allowable independent claim is also allowable, the Applicants respectfully submit that the Examiner should also withdraw this rejection as to dependent claims 2-4, 8-9, 12-14, and 16-19.

Claims 5 and 10

Claims 5 and 10 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Barkan, in view of Kung, and further in view of Ganesan, U.S. Patent Number 5,535,276 (hereinafter “Ganesan”). The Applicants respectfully traverse this rejection.

Claims 5 and 10 depend, respectively, from independent claims 1 and 7. For at least the aforementioned reasons, claims 1 and 7 are patentable over the Barkan and Kung references, either taken alone or in combination. Since any claim that depends from an allowable independent claim is also allowable, the Applicants respectfully submit that the Examiner should also withdraw this rejection as to dependent claims 5 and 10.

Furthermore, the Ganesan reference describes a system and method for securing communications using split private key asymmetric cryptography. However, the Ganesan reference, like the Barkan and Kung references, also does not describe generation of a secret key at the first gateway, distribution of the secret key to both telephony adapters, or the telephony adapters as described in independent claims 1 and 7. Thus, the combination of Barkan, Kung, and Ganesan, taken either alone or in combination, do not describe the presently claimed invention.

Conclusion

In view of the foregoing discussion, Applicants believe that claims 1-19 are allowable over the cited art. Applicants respectfully submit that all pending claims are in full condition for allowance, and earnestly request that the Examiner withdraw all rejections of the claims and enter a Notice of Allowance at the earliest date possible.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

Respectfully submitted,
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